AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/522,594

Attorney Docket No.: Q85900

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled)

2. (previously presented): A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate, wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element; and

an Mn elution amount when immersing said particles in a mixture comprising an electrolyte salt and a carbonate solvent is 1000 ppm or less as determined by inductive coupling plasma emission analysis; and

a specific surface area of said particles as determined by the BET method is 0.3 m²/g to $0.8 \text{ m}^2/\text{g}$ both inclusive: $\text{Li}_{1+x}\text{Mn}_{2-x}\text{O}_4$ (1)(in said formula (1) above, $0.15 \le x \le 0.24$).

3. (canceled).

4. (previously presented): The positive electrode active material for a secondary battery according to claim 2, wherein said lithium nickelate is a compound represented by the following formula (2) or said compound in which some of Co or O sites are replaced with another element:

LiNi_{1-y}Co_yO₂ (2)(in said formula (2) above, $0.05 \le y \le 0.5$).

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5. (previously presented): The positive electrode active material for a secondary battery according to claim 2, wherein said lithium nickelate is a compound represented by the following formula (3):

$$LiNi_{1-\alpha-\beta}Co_{\alpha}M_{\beta}O_{2} \qquad (3)$$

(in said formula (3) above, M comprises at least one of Al and Mn; $0.1 \le \alpha \le 0.47$; $0.03 \le \beta \le 0.4$; and $0.13 \le \alpha + \beta \le 0.5$).

6. (previously presented): The positive electrode active material for a secondary battery according to claim 2, wherein said lithium nickelate is a compound represented by the following formula (4):LiNi_{1-p-q}Co_pM_qO₂(4)

(in said formula (4) above, M comprises at least one of Al and Mn; $0.1 \le p \le 0.5$; $0.03 \le q \le 0.5$; and $0.13 \le p + q < 1$).

- 7. (previously presented): The positive electrode active material for a secondary battery as claimed in claim 2, wherein when a weight ratio of said lithium manganate to said lithium nickelate is a: (100-a), "a" is in a range of $20 \le a \le 80$.
- 8. (previously presented): A positive electrode for a secondary battery comprising said positive electrode active material for a secondary battery as claimed in claim 2 which is bound via a binder.

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9. (previously presented): A secondary battery comprising at least a positive electrode

and a negative electrode, comprising said positive electrode active material for a secondary

battery as claimed in claim 2.

10. (previously presented): The secondary battery as claimed in claim 2, wherein said

negative electrode comprises amorphous carbon as a negative electrode active material.

11. (withdrawn): A process for manufacturing said positive electrode active material for

a secondary battery as claimed in claim 2, comprising the steps of: mixing an Mn source and an

Li source to prepare a first mixture, which is then subjected to a first calcination at a temperature

of no less than 800 °C; and

mixing a first-calcination product obtained by said first calcination with said Li source to

prepare a second mixture with a higher rate of said Li source than said first mixture, and

conducting a second calcination of said second mixture at a temperature of no less than 450 °C

and lower than said first calcination to obtain said lithium manganate,

wherein a D_{50} particle size of said Li source is 2 μ m or less.

12. (new) The positive electrode active material for a secondary battery according to

Claim 2, wherein a Mn elution amount of said lithium manganate particles is 1000 ppm or less.

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